

REMARKS

Claims 1-3, 5, 6, and 10-16 remain pending in the same form as provided in Applicants' Amendment A filed on September 7, 2004.

In item 18 of the office action, the Examiner requests clarification of whether "instrumentation entity" is a subset of "design entity." Applicants respond in the negative. The essence of the distinction between an "instrumentation entity" and a convention HDL design entity is the very essence of much of the substance of the proposed invention recited in the claims as explained in detail in Applicants' Amendment A filed on September 7, 2004.

In item 20 of the office action, the Examiner requests that Applicants define the terms "pre-pended flag" and "proto" used in Applicants remarks in Amendment A. Given the multifaceted and very lengthy specification, Applicants included many direct references to assist the Examiner in confirming the points made in Applicants remarks. Specifically, Applicants repeated referenced Figures 4B-4D and corresponding text passages in support of Applicants remarks. In the context of the invention and embodiments depicted and explained with reference to Figures 4C and 11B-11C the definition of "pre-pended flag" is unambiguous. Namely, a pre-pended flag is a flag that is pre-pended to the entity in question, as the comment identifier flags in Figures 4C and 11B-11C clearly depict. The term "proto" is a somewhat arbitrary term used by Applicants throughout the specification to describe a memory resident data structure representing a compiled version of an HDL design entity or an "instrumentation entity" within the meaning of the proposed invention. One express description of a "proto" is provided at page 23, line 27 through page 24, line 8, which explains that "... a proto is a data structure that, for each entity in the model, contains information about the ports of the entity, the body contents of the entity, and a list of references to other entities directly instantiated by the entity..." Proto data structures are further depicted and described with reference to Figure 4D (design entity proto data structures 463, instrumentation entity proto data structures 466). In Amendment A, Applicants expressly invited the Examiner to contact the undersigned attorney of record if such would further or expedite the prosecution of the present application and contend that a very brief communication would suffice to address such confusion.

Rejections Under 35 U.S.C. § 101

Claims 1-3, 5-6, and 10-16 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, at items 23 and 24, the Examiner asserts that while claim 1 is directed to a structural type invention, the subsequent limitations "appear to be 'process' type limitations." Applicants traverse these rejections. It is a very well-known and accepted practice to use function type language (i.e. language describing a process) to characterize structural elements in a machine, system, program product type claims. "Means for" is an officially recognized claim type that uses this style.

Rejections Under 35 U.S.C. § 112

Claims 1-3, 5-6, and 10-16 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, at item 32, the Office Action asserts that claims 1-3, 5-6, and 10-16 are indefinite because they embrace or overlap two different statutory classes of invention for the reasons set forth in the foregoing rejections under 35 U.S.C. § 101. Applicants thus traverse these rejections for the same reasons set forth above regarding the 101 rejections.

At item 33, it is suggested that perhaps some alterations to the structure (e.g. using indentations) may assist in clarifying the claims. Given the multitude of rejections and objections that have been directed to terms, structure, and other logistical issues, and in spite of several telephone calls from Applicants to the Examiner seeking clarification, Applicants are simply unsure what structural changes might help.

Applicants have contacted the Examiner by telephone on several occasions and appreciate the Examiner's willingness to discuss the issues.

Summary

In both the first Office Action dated May 4, 2004 and the present final Office action, multiple issues surrounding term definitions have arisen. For the foregoing reasons, Applicants believe the rejections under 35 U.S.C. § 101 and § 112 should be withdrawn and a Notice of Allowance for the pending claims issued.

Given the length and complexity of Applicants specification, Applicants again invite the Examiner to contact the undersigned attorney of record at (512) 343-6116 if such would further or expedite the prosecution of the present Application.

Respectfully submitted,



Matthew W. Baca

Reg. No. 42,277

DILLON & YUDELL LLP

8911 North Capital of Texas Highway, Ste. 2110

Austin, Texas 78759

Telephone (512) 343-6116

Facsimile (512) 343-6446

ATTORNEY FOR APPLICANTS